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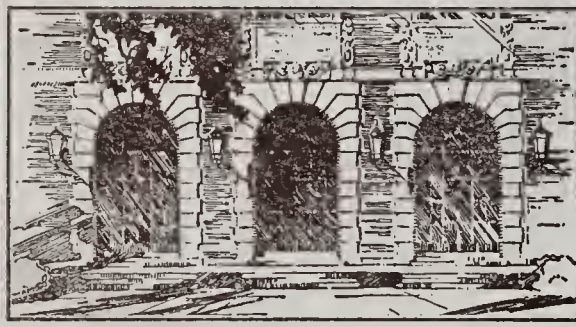
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LIST

OF

LIGHTS, BUOYS, BEACONS,  
AND DAY MARKS

OF THE

PHILIPPINE ISLANDS.

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A copy of this list will be sent free of charge to any shipmaster on application to the  
Superintendent of Lighthouse Maintenance, Manila, P. I.

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LIST

OF

LIGHTS OF THE PHILIPPINE ISLANDS.

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CORRECTED TO JANUARY 1, 1904.

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MANILA :  
BUREAU OF PUBLIC PRINTING.  
1904.

P 12200



# LIGHTHOUSE ESTABLISHMENT OF THE PHILIPPINE ISLANDS.

## BUREAU OF COAST GUARD AND TRANSPORTATION.

[Organized in conformity to Act No. 266, United States Philippine Commission.]

---

J. M. HELM,  
Commander, United States Navy,  
Chief of Bureau of Coast Guard and Transportation.

SPENCER COSBY,  
Captain, Corps of Engineers, United States Army,  
Superintendent of Lighthouse Construction.

ALEX. FRANKLYN,  
Superintendent of Lighthouse Maintenance.

## TO MARINERS.

BUREAU OF COAST GUARD AND TRANSPORTATION,  
*Manila, P. I., January 1, 1904.*

Mariners and others interested in commerce and the preservation of life and property from loss by shipwreck on the coasts of the Philippine Islands are earnestly requested to give prompt information to the Superintendent of Lighthouse Maintenance, Manila, P. I., of all cases of injury to, or unsatisfactory condition or service of, any aid to navigation, or of the necessity of additional aids.

They are requested to inform him of all cases in which lights are not exhibited promptly at sunset and extinguished at sunrise, where they are not properly attended to during the night, when floating aids are out of position, and of all cases in which the published instructions are not strictly complied with, so that the Bureau may, with as little delay as possible, apply the proper remedy and prevent neglect of duty on the part of persons connected with the aids to navigation of the Philippine Islands.

## NOTES.

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The lights of the Philippine Islands in this list are arranged as nearly as possible in their regular geographical order from north to south, except in the Visayan Islands, where they are arranged in the most convenient manner from east to west. The lights about each estuary or harbor are arranged in regular order from the sea to the head of navigation; the lights in each group are bracketed under the name of the estuary or harbor.

The geographical positions of all lights are not absolutely certain, having not yet been accurately determined.

In the column "Characteristic and order of light" the time interval of flashing lights is given from the beginning of one flash to the beginning of the following flash.

In the column "Distance visible, in nautical miles" will be found the distances within which the lights can be seen under ordinary conditions of the atmosphere, the height of the light being measured from mean high water and the eye of the observer taken at an elevation of 15 feet above sea level.

Bearings and courses given are *true*.

Bearings relating to the visibility of lights are given from *seaward*, not from the light.

Heights are referred to mean high water.

Longitudes are east from Greenwich.

## List of lights of

Number.	Name and location.	Latitude, north; longitude, east.			Characteristic and order of light.	
		°	'	"		
NORTH COAST OF LUZON.						
1	CAPE ENGAÑO On summit of hill at northern point of Palín Island, which forms Cape Engaño. (See Plate I.)	18 122	35 06	08 00	Flashing white; shows double flash every 30 seconds. <i>First order.</i>	
2	LINAO On Point Linao northwest of Aparri; at mouth of Río Grande de Cagayan, 1,684 yards from the left bank of the river and 278 yards from the sea. (See Plate I.)	18 121	22 34	45 50	Flashing white; flashes every second. <i>Sixth order.</i>	
WEST COAST OF LUZON.						
3	CAPE BOJEADOR On Cape Bojeador on the summit of a hill 1,750 yards east of the NW. extremity of the Cape. (See Plate II.)	18 120	30 33	18 35	Flashing white; shows one flash every min- ute; duration of flash, 15 seconds. <i>First order.</i>	
4	Range. SAN FERNANDO, FRONT On beach a few yards south of pier at San Fernando.	16 120	37 18	15 21	Two fixed red; one light 1 foot above the other. <i>Two lens lanterns.</i>	
5		SAN FERNANDO, REAR On small hill 700 yards from and S. 36° E. of front light.	16 120	36 18	55 35	Two fixed red; one light 1 foot above the other. <i>Two lens lanterns.</i>
6	SAN FERNANDO POINT On northeast extremity of San Fernando Point. At western point of entrance to San Fernando Harbor.	16 120	37 16	42 38	Fixed white. <i>Port light</i>	
7	DAGUPAN On Point Guecet on northeast side of entrance to Dag- upan River.	16 120	05 19	30 30	Fixed red. <i>Lens lantern</i>	
8	CAPONES On the island of Capon Grande 328 yards from the western end of island. (See Plate II.)	14 120	55 00	46 00	Flashing white; shows one flash every 30 seconds. <i>First order.</i>	
9	SUBIG BAY On Grande Island at entrance to Subig Bay.	14 120	46 13	10 38	Fixed white. <i>Lens lantern</i>	
10	CORREGIDOR On highest point of Corregidor Island at entrance to Manila Bay.	14 120	22 34	50 18	Flashing white and red alternately; interval be- tween flashes, 10 seconds. <i>Second order.</i>	
11	PULO CABALLO On northeast part of Pulo Caballo Island at entrance to Manila Bay.	14 120	22 37	07 00	Fixed white. <i>Sixth order</i>	
12	SAN NICOLAS SHOAL On shoal about 5 miles from southern shore of Manila Bay and about half way between Corregidor and Cavite.	14 120	26 45	40 00		
13	Manila Bay. SANGLEY POINT On Sangley Point 1 mile north of Cavite	14 120	29 54	52 40	Fixed red. <i>Port light</i>	
14		PASIG On north side of quay at entrance to Pasig River.	14 120	35 57	54 15	Fixed red. <i>Sixth order</i>
15		PASIG, SOUTH On south side of quay at entrance to Pasig River.	14 120	35 57	50 25	Two fixed white; on a horizontal line 3 feet apart. <i>Electric light.</i>
16		MANILA CANAL ENTRANCE At entrance to canal from behind breakwater.	14 120	35 57	47 31	Fixed red. <i>Lens lantern</i>
17		NAPINDAN At exit of Pasig River from Laguna de Bay.	14 121	33 05	00 10	Fixed red. <i>Lens lantern</i>
17a		LOS BAÑOS At Los Baños on south shore of Laguna de Bay on end of pier.	14 121	11 13	44 20	Two fixed white and one fixed red. <i>Lens lan- terns.</i>
18		CABRA On Cabra Island near west point of island 656 yards from the sea. (See Plate III.)	13 120	53 01	28 30	Flashing white; shows a group of two white flashes every minute; duration of each flash, 8 seconds; interval between flashes, 7 seconds; interval between groups, 37 seconds. <i>First order.</i>



## the Philippine Islands.

Number.	Height, in feet—		Distance visible, in nautical miles.	Description of station.	Remarks. (Bearings in all cases are given clockwise—i. e., from W. to N.).
	Of light above mean high water.	From base of structure to center of lantern.			
1	315	47	25	Tower and dwelling are built of light gray granite, appearing as one building. Blinds green, lantern white.	Illuminates an arc of $250^{\circ}$ between N. $61^{\circ}$ E. and N. $49^{\circ}$ W.
2	36	30	11	Cylindrical iron tower painted white. The granite dwelling is 10 feet south of tower.	
3	359	65	28	Tower and dwelling, both of red brick, are connected by a covered way. Base of tower is a truncated eight-sided pyramid; upper part of tower is an eight-sided prism. Lantern white.	Illuminates an arc $222^{\circ}$ between N. $14^{\circ}$ E. and S. $56^{\circ}$ W.
4	24	12	5	Two lanterns are supported on center pole of a beacon which consists of three poles with alternate strips of red and white nailed on them.	Marks channel clear of reefs leading to harbor. Magnetic bearing of range is SE. $\frac{1}{4}$ S.
5	111	12	5	Same as for above front light.	
6	33	20	10	Lantern is hoisted between iron supports; small cabin at base; all painted white.	Illuminates an arc of $240^{\circ}$ seaward.
7	28	20	5	Lantern is hoisted between iron supports; dwelling is of nipa, about 100 yards in rear of light.	
8	229	65	24	Tower and dwelling of red brick with gray trimmings; a square tower on the northeast corner of the dwelling.	Illuminates an arc of $306^{\circ}$ from N. $63^{\circ}$ W. to S. $63^{\circ}$ W.
9	189	-----	6	Light is displayed from a pole on an incomplete tower.	It is expected to establish a flashing light here during 1904.
10	630	60	33	Cylindrical white tower with dwelling surrounding the base.	Visible all around, except when in near northern shore of island.
11	96	11	10	White, cylindrical tower -----	Visible over an arc of $203^{\circ}$ from bearing S. $5^{\circ}$ W. to N. $28^{\circ}$ E.; is artificially screened over remaining arc.
12	34	34	-----	Cylindrical iron tower painted red; base a concrete block.	It is expected to establish a flashing light on this shoal during 1904.
13	43	40	8	Light on iron framework; nipa dwelling at base of tower.	
14	52	49	10	Cylindrical tower and dwelling are painted red, lantern white; dwelling is immediately in rear of tower.	
15	15	-----	5	Light is displayed from corner of sea wall-----	
16	-----	-----	2	Small metal tower painted red -----	
17	40	40	7	On pole attached to an iron framework -----	
17a	30	30	2	Lanterns are mounted on a white tripod one above the other, 4 feet apart, red one in center.	Visible over an arc of $86^{\circ}$ from S. $66^{\circ}$ E. to S. $20^{\circ}$ W. Depth of water at pier, 7 feet.
18	216	67	23	Tower and dwelling of red brick; a square tower on west angle of a rectangular dwelling; lantern white.	Visible over an arc of $268^{\circ}$ from N. $38^{\circ}$ W. to S. $50^{\circ}$ W. The bearing N. $38^{\circ}$ W. passes $3^{\circ}$ to the eastward of the east coast of Lubang Island.

## List of lights of the

Number.	Name and location.	Latitude, north; longitude, east.			Characteristic and order of light.
		°	'	"	
WEST COAST OF LUZON—Continued.					
19	CAPE SANTIAGO On Cape Santiago 66 yards north of southern extremity of cape.	13 120	46 39	15 15	Flashing white; shows every 36 seconds a group of three flashes, each of 4 seconds' duration, sep- arated by intervals of 2 seconds and followed by an interval of 20 seconds. <i>Fourth order.</i>
20	BALAYAN On the beach at Balayan.	13 120	56 44	00 00	Fixed red. <i>Lens lantern</i>
21	LEMERY About 30 yards back from beach and marks anchorage at Lemery and Taal.	13 120	53 55	00 00	Fixed red. <i>Lens lantern</i>
22	BATANGAS At end of stone pier at Batangas.	13 120	44 02	30 35	Two fixed red. <i>Lens lanterns</i>
23	MALABRIGO Near extremity of point Malabrigo (See Plate IV.)	13 121	36 15	00 37	Flashing white and red; shows a group of two white flashes followed by one red every 20 seconds; interval between white flashes, 3 seconds; interval between white and red flashes, 8½ seconds. <i>Third order.</i>
24	ESCARCEO POINT (MINDORO) On Escarceo Point on northern coast of Mindoro.	13 120	31 59	28 15	Fixed white. <i>Port light</i>
25	PUERTO GALERA (MINDORO) On hill at western end of Veradero Bay, north coast of Mindoro.	13 120	30 57	35 10	Fixed white. <i>Lens lantern</i>
26	CALAPAN (MINDORO) On northern coast of Mindoro at extreme point of bluff at Calapan.	13 120	25 10	00 00	Two fixed red and white. <i>Two lens lanterns</i>
27	LUCENA On north side of entrance to river at Lucena.	13 121	54 35	45 45	Fixed white. <i>Lens lantern</i>
28	PITOGO Near shore at Pitogo.	13 122	46 05	30 30	Fixed red. <i>Lens lantern</i>
29	BOAC (MARINDUQUE) At entrance to harbor of Boac, Marinduque Island.	13 121	27 48	00 00	Fixed red. <i>Lens lantern</i>
30	BAGATAO On northwest point of Bagatao Island at entrance to Sorsogon Harbor.	12 123	50 48	00 30	
31	CAPUL On Capul Island 165 yards from northern extremity of the island. In western part of San Bernardino Straits. (See Plate IV.)	12 124	29 08	00 40	Flashing white; shows every 30 seconds a group of three white flashes separated by intervals of 4½ seconds and followed by an interval of 21 seconds. <i>Third order.</i>
32	SAN BERNARDINO On summit of San Bernardino Islet at eastern entrance to San Bernardino Straits.	12 124	45 17	18 11	Flashing white and red alternately; interval between flashes, 15 seconds. <i>Third order.</i>
EAST COAST OF LUZON.					
33	LEGASPI On Albay Gulf 100 yards from the beach and ½ mile north of the town of Legaspi.	13 123	09 44	56 40	Fixed white. <i>Port light</i>
VISAYAN ISLANDS.					
34	ROMBLON At Romblon Harbor, Romblon Island.	12 122	35 16	50 45	
35	BUGUI POINT (MASBATE) On highest part of northwest point of Masbate Island 185 yards east of its extremity. (See Plate IV.)	12 123	36 14	00 36	Flashing white and red; shows every 10 seconds a group of two white flashes followed by one red; interval between white flashes, 1½ sec- onds; interval between white and red flashes, 4½ seconds. <i>Third order.</i>
36	PALANOG (MASBATE) At western point of entrance to Palanog Harbor, Mas- bate Island.	12 123	22 36	45 26	Two fixed, white and red. <i>Two lens lanterns</i>

## Philippine Islands—Continued.

Number.	Height, in feet—		Distance visible, in nautical miles.	Description of station.	Remarks. (Bearings in all cases are given clockwise—i. e., from W. to N.).
	Of light above mean high water.	From base of structure to center of lantern.			
19	89	51	15	Tower and dwelling of red brick; tower is attached to south side of dwelling; lantern white.	Illuminates an arc of 232° from bearing N. 89° W. to S. 37° E.
20	11	-----	2	The lantern is hoisted on a pole -----	
21	14	-----	2	The lantern is hoisted on a pole -----	
22	20	-----	5	Two lanterns hung on a pole 7 feet apart horizontally --	
23	184	56	20	Tower, dwelling, and lantern white; tower detached, but appears from seaward to be in center of dwelling.	Illuminates an arc of 220° from bearing N. 86° W. to S. 46° E.
24	134	25	10	Light is exhibited from white wooden tripod on extreme point of bluff; dwelling is a nipa shack in rear of light.	Illuminates an arc of 282° seaward.
25	92	-----	5	Light is hoisted on a flag pole on hill -----	A bearing of N. 66° W. on light leads to an anchorage of 9 fathoms.
26	64	-----	2	Lanterns are hung on yardarm of a white signal mast; red light on western and white on eastern arm.	
27	14	-----	3	Light is exhibited from bamboo pole on beach -----	
28	39	-----	3	Lantern is hung on a pole in rear of the dwelling of the inspector of customs.	Vessels entering should bring light to bear N. 48° E. A landing place for small boats can be found about 30 yards west of the light; at other places the shore is rocky.
29	21	-----	3	Lantern is hung on a pole near quartermaster's house---	
30	-----	-----	-----	-----	It is expected to establish a flashing light on this island in 1904.
31	142	49	18	Tower and dwelling are of graystone; tower is round; the dwelling is at base of tower.	
32	177	49	20	Tower and dwelling are of graystone; tower is round; lantern white.	Visible all around the horizon.
33	66	50	10	Light is erected on a tripod -----	Illuminates an arc of 240° from bearing S. 40° E. to N. 20° E.
34	-----	-----	-----	-----	It is expected to establish a port light here in 1904.
35	218	49	22	Tower and dwelling are of graystone; tower is a truncated cone; dwelling is at base of tower; lantern white.	Visible over an arc of 293° from bearing N. 6° W. to N. 73° W.
36	24	-----	5	Lights are exhibited on a bamboo structure: the red light is 6 feet above the white light.	



Number.	Name and location.	Latitude, north; longitude, east.			Characteristic and order of light.	
		°	'	"		
VISAYAN ISLANDS—Continued.						
37	CALBAYOG (SAMAR)----- Near outpost at northern end of town of Calbayog, Samar.	12 124	04 36	00 00	Fixed red. <i>Port light</i> -----	
38	CATBALOGAN (SAMAR)----- On north bank of Catbalogan River, at Catbalogan, Samar.	11 124	46 52	38 36	Fixed white. <i>Port light</i> -----	
39	CANAUAY----- Near west coast of Samar on a small islet south of Jana- batas channel.	11 124	26 51	25 03	Fixed red. <i>Port light</i> -----	
40	TACLOBAN (LEYTE)----- On a hill close to an old fort one-fourth mile west of Point Panarangan, Leyte.	11 125	15 00	13 06	Fixed red. <i>Lens lantern</i> -----	
41	JINTOTOLO----- On highest point and near center of Jintotolo Island; south of southwest point of Masbate. (See Plate V.)	11 123	51 07	02 14	Flashing white and red alternately; interval between flashes, 10 seconds. <i>Third order.</i>	
42	MANIGONIGO----- On Manigonigo Islet at northeast extremity of Panay. (See Plate V.)	11 123	36 10	31 40	Flashing white; one flash every 5 seconds. <i>Sixth order.</i>	
43	GIGANTES----- On the most salient part of the northern extremity of North Gigantes Island. (See Plate V.)	11 123	38 21	37 05	Flashing white and red; shows every 15 seconds a group of three white flashes followed by one red; interval between white flashes, 2½ seconds; interval between white and red flashes, 5 seconds. <i>Fourth order.</i>	
44	TANGUINGUI----- On Tanguingui Islet northwest of northern point of Cebu.	11 123	29 52	30 00	Fixed white. <i>Lens lantern</i> -----	
45	CAPITANCILLO----- On small islet off east coast of Cebu.	10 124	59 05	03 50	Fixed white. <i>Lens lantern</i> -----	
46	BAGACAY (CEBU)----- On Bagaay Point on east coast of Cebu at northern entrance of Cebu Harbor. (See Plate VI.)	10 124	23 01	00 15	Fixed white <i>Sixth order</i> -----	
47	Cebu Harbor. { MACTAN----- At northern point of Mactan Island.	10 123	20 59	00 10	Fixed red. <i>Port light</i> -----	
48		SAN PEDRO----- On the southeast angle of Fort San Pedro in the town of Cebu.	10 123	17 54	30 25	Fixed red. <i>Port light</i> -----
49		SAN NICOLAS----- On church tower in the town of Cebu.	10 123	17 53	34 27	Fixed white. <i>Port light</i> -----
50		LIPATA BANK----- Off Lipata Point at southern entrance to Cebu Harbor.	10 123	14 52	35 36	Fixed red. <i>Port light</i> -----
51		LANIS LEDGE----- On western end of Mactan Island at southern entrance to Cebu Harbor.	10 123	14 54	22 05	Fixed green. <i>Port light</i> -----
52	CALABAZAS----- On southern extremity of Calabazas Islet on east coast of Panay. (See Plate VI.)	11 123	04 00	00 36	Flashing white with a fixed red sector; shows every 15 seconds a group of three white flashes separated by intervals of 2 seconds and fol- lowed by interval of 11 seconds. <i>Fourth order.</i>	
53	SIETE PECADOS----- On the largest of the Siete Pecados Islets at eastern en- trance to Iloilo Straits. (See Plate VI.)	10 122	45 40	55 03	Fixed white with a fixed red sector. <i>Sixth order.</i>	
54	ILOILO (PANAY)----- At left point of entrance to Iloilo River.	10 122	41 34	45 33	Fixed red. <i>Port light</i> -----	



## Philippine Islands—Continued.

Number.	Height, in feet—		Distance visible, in nautical miles.	Description of station.	Remarks. (Bearings in all cases are given clockwise—i. e., from W. to N.).
	Of light above mean high water.	From base of structure to center of lantern.			
37	-----	55	5	Light erected on a tripod-----	Visible through an arc of 180° from ESE. to WNW.
38	130	-----	10	Light is exhibited on a flagstaff at headquarters building; typhoon signals 600 feet south of light.	Visible through an arc of 117° from N. 13° W. to S. 16° E. The light obscured to the northward over the Darajuay Islands and to the eastward over the Cagdullon Islands.
39	32	19	7	Light is hoisted between two iron supports with a small cabin at base; all painted white; dwelling is in rear of light.	Illuminates an arc of 123° from bearing N. 72° E. to S. 15° W.
40	74	-----	5	Light is exhibited on a flagstaff-----	
41	187	51	20	Tower and dwelling gray; tower round; dwelling at base of tower.	Illuminates the entire horizon.
42	68	29	14	Cylindrical iron tower painted white attached to rear of dwelling; dwelling red with graystone trimmings.	Illuminates the entire horizon.
43	77	38	16	Tower and dwelling are white, forming one structure; trimmings of tower are lead colored.	Illuminates an arc of 270° from bearing N. 76° E. to N. 17° W.; is obscured by Naidajon Island over an arc of 8° of this arc of 270°.
44	50	34	6	Light is erected on a tripod-----	It is expected to establish a flashing light here during 1904.
45	35	32	5	Light is exhibited on a pole above a white frame building.	It is expected to establish a flashing light here during 1904.
46	45	21	8	Tower is round and white; dwelling is of nipa in rear of tower.	A new structure is being erected at a higher elevation on the point. Owing to the small elevation of the present light it is liable to be confused with ship lights.
47	38	25	6	Light is hoisted between iron supports with small cabin at base; all white.	Illuminates an arc of 255° from bearing N. 15° E. to W.
48	44	-----	3	Small tower on southeast angle of Fort San Pedro-----	The light is sometimes obscured in western part of harbor by the hulls of vessels lying at the wharves.
49	69	-----	6	Light is exhibited on a small platform on south face of a church tower.	Illuminates an arc of 180° from W. by S. to E. by N. (approximate).
50	42	42	7	Wooden tripod with small watch room in base supports light.	Not to be depended on during southwest gales.
51	36	36	5	Wooden tripod on bank of coral supports light. Pilot's and fishermen's huts are near.	
52	99	39	16	Tower and dwelling are white, forming one structure; trimmings of tower are lead colored.	Illuminates an arc of 274° from bearing S. 6° W. to S. 80° E. The red sector is visible 3 miles and covers the Pepita Rocks; bearing of light from rocks, N. 39° E.
53	97	29	11	Tower and dwelling are white; tower is cylindrical with lead-colored trimmings.	Illuminates entire horizon. The red sector covers Iguana Bank from N. 73° W. to N. 53° W.
54	27	23	6	Light is hoisted between two iron supports attached to keeper's dwelling.	Illuminates an arc of 240° from S. 9° E. to N. 50° 30' E. Obscured by fort between N. 26° 15' E. and N. 35° 30' E.

## List of lights of the

Number.	Name and location.	Latitude, north; longitude, east.			Characteristic and order of light.
		°	'	"	
55	LUSARAN (GUIMARAS) ----- On southwest extremity of Guimaras Island, situated $4\frac{1}{2}$ miles N. $24\frac{1}{2}^{\circ}$ W. from Point Lusaran.	10 122	28 27	37 36	Flashing white and red; shows every 15 seconds group of three white flashes followed by one red; interval between white flashes, $2\frac{1}{2}$ seconds; interval between white and red flashes, 5 seconds. <i>Fourth order.</i>
56	BAJO APO ----- On small island about 22 miles west of central Mindoro.	12 120	50 27	00 00	
57	MANIGUIN ----- On Maniguin Islet off west coast of Panay.	11 121	41 43	00 00	
CALAMIANES ISLANDS.					
58	CORON ----- On southwestern part of Busuanga Island.				Fixed white. <i>Lens lantern</i> -----
50	CULION ----- On northeastern part of Calamian Island.				Fixed white. <i>Lens lantern</i> -----
CUYOS ISLANDS.					
60	CUYOS HARBOR ----- On southwestern part of Cuyo Island.	10 121	51 00	26 25	Fixed red. <i>Lens lantern</i> -----
PARAGUA.					
61	TIDEPole POINT ----- At Tidepole Point, south of town of Puerto Princesa.	9 118	43 42	43 55	Fixed white. <i>Lens lantern</i> -----
62	PUERTO PRINCESA ----- On pier at Puerto Princesa.	9 118	44 42	30 40	Fixed red. <i>Lens lantern</i> -----
BALABAC ISLAND.					
63	CAPE MELVILLE ----- On Cape Melville at southern extremity of Balabac Island about 750 yards from the sea. (See Plate III.)	7 117	49 00	20 08	Flashing white; shows one flash every 20 seconds. <i>First order.</i>
MINDANAO.					
64	POLLOK HARBOR ----- At end of pier at town of Pollok.	7 124	21 13	30 00	Fixed red. <i>Port light</i> -----
65	ZAMBOANGA ----- At end of mole at town of Zamboanga.	6 122	54 04	10 12	Fixed red. <i>Port light</i> -----
JOLO.					
66	JOLO ----- On northwest side of Jolo Island.	6 120	03 59	40 40	Fixed red. <i>Port light</i> -----

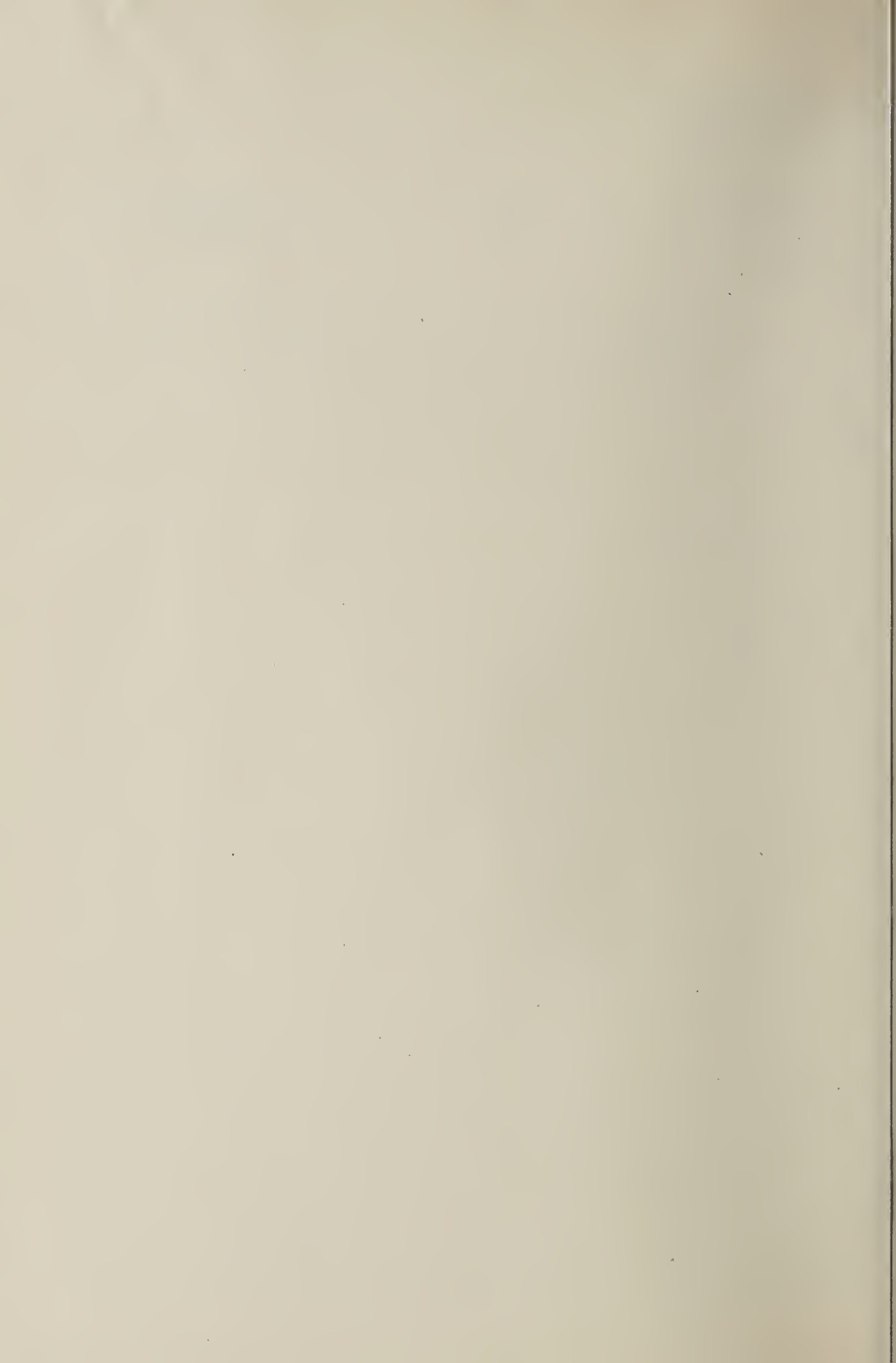
Philippine Islands—Continued.

Number.	Height, in feet—		Distance visible, in nautical miles.	Description of station.	Remarks. (Bearings in all cases are given clockwise—i. e., from W. to N.).
	Of light above mean high water.	From base of structure to center of lantern.			
55	111	38	17	Tower and dwelling white; tower is eylindrical with the dwelling at its base; trimmings of the tower are gray.	Illuminates an arc of 215° from N. 25° W. to S. 10° W.
56					It is expected to establish a flashing light on this island during 1904.
57					It is expected to establish a flashing light on this island during 1904.
58			5		
59			5		
60			2	Light is displayed on an old tower at end of pier	
61	43		5	Light is displayed from structure at Tidepole Point	
62			2	Light is displayed on outer end of wharf	
63	296	90	26	Tower and dwelling of granite; tower is octagonal; lantern white.	Illuminates an arc of 265° from S. 65° W. to S. 30° E.
64			6	Light is displayed from an iron tripod at eastern end of pier.	
65			7		
66	36		6	Oetagonal tower of rough masonry painted white; corners and cornice are dark colored.	Illuminates an arc of 180° seaward.





## lights of the Philippine Islands.



LIST

OF

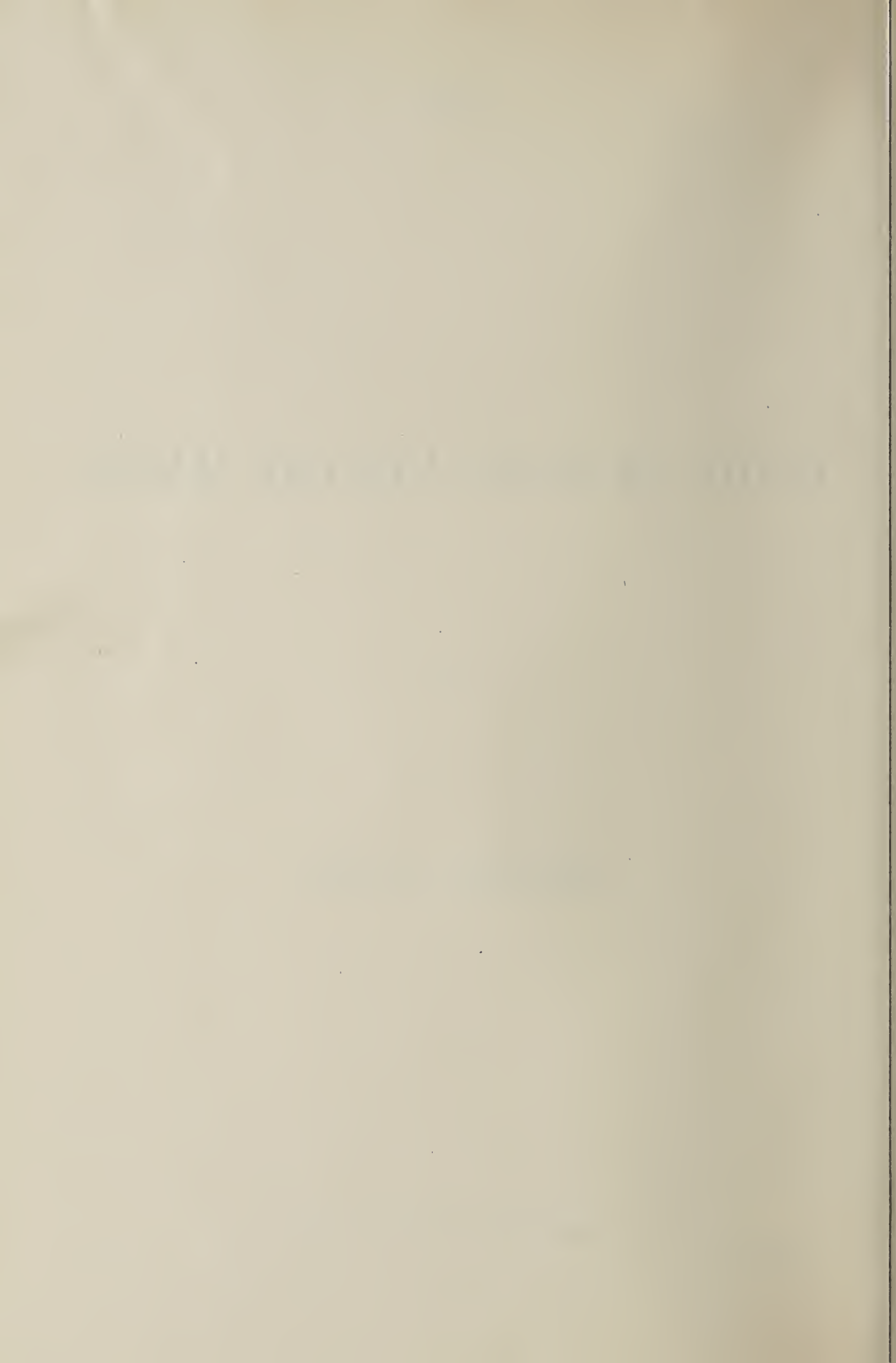
BUOYS, BEACONS, AND DAY MARKS

OF THE

PHILIPPINE ISLANDS.

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CORRECTED TO JANUARY 1, 1904.





## NOTICE TO MARINERS.

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BUREAU OF COAST GUARD AND TRANSPORTATION,

*Manila, P. I., January 1, 1904.*

Mariners are cautioned to observe that in many cases where buoys are moored on the edge of coral reefs and placed in depths of three or four fathoms of water for convenience, the water may shoal suddenly to a very few feet within a distance of a boat's length.

Many of the buoys still in use in the Philippine Islands, notably those at Cebu and Iloilo, are of the Spanish type, conical or flat, and will continue to be used until condemned, when they will be replaced by buoys of the United States pattern.

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### EXPLANATION OF THE LIST.

In conformity with section 4678 of the Revised Statutes of the United States, the following order is observed in coloring and numbering the buoys along the coasts or in bays, harbors, sounds, or channels, viz:

1. In approaching the channel, etc., from seaward, *red buoys*, with *even numbers*, will be found on the *starboard* side of the channel, and must be left on the *starboard* hand in passing in.

2. In approaching the channel, etc., from seaward, *black buoys*, with *odd numbers*, will be found on the *port* side, and must be left on the *port* hand in passing in.

3. *Buoys* painted with *red* and *black horizontal stripes* will be found on *obstructions*, with the channel ways on either side of them, and may be left on either hand in passing in.

4. *Buoys* painted with *white* and *black perpendicular stripes* will be found in *midchannel*, and must be passed close-to to avoid danger.

All other distinguishing marks to buoys will be in addition to the foregoing, and may be employed to mark particular spots, *a description of which will be given in the printed list of buoys.*

Perches, with balls, cages, etc., will, when placed on buoys, be at turning points, the color and number indicating on which side they shall be passed.

Different channels in the same bay, sound, river, or harbor will be marked, as far as practicable, by different descriptions of buoys. Principal channels will be marked with nun buoys; secondary channels will be marked with can buoys; and minor channels with spar buoys. When there is but one channel, nun buoys, properly colored and numbered, are usually placed on the starboard side and can buoys on the port side of it.

Whenever practicable the towers, beacons, buoys, spindles, and all other aids to navigation are arranged in the light list in regular order *as they are passed by vessels entering from the sea.*

Day beacons, stakes, and spindles (except such as are on the sides of channels, which will be colored like buoys) are constructed and distinguished with special reference to each locality, and particularly in regard to the background upon which they are projected.

Bearings are *magnetic*, and distances in nautical miles.

[No. 849.]

**AN ACT FOR THE PROTECTION OF BUOYS AND BEACONS.**

*By authority of the United States, be it enacted by the Philippine Commission, that:*

SECTION 1. Any person or persons who shall moor any vessel or vessels of any kind or name whatsoever or any boat, skiff, barge, scow, raft or part of a raft to any buoy or beacon placed as an aid to navigation in any bay, channel, harbor, river, arm of the sea, or any other waters of the Philippine Islands by the authority of the Lighthouse Establishment of the Philippine Islands, or shall in any manner hang on with any vessel, boat, skiff, barge, scow, raft, or part of a raft to any such buoy or beacon, or shall willfully remove, damage, or destroy any such buoy or beacon, or shall cut down, remove, damage, or destroy any beacon or beacons erected on land in the said Islands by the authority of the Lighthouse Establishment of the Philippine Islands, shall for every such offense be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than one thousand pesos, Philippines currency, or by imprisonment in the provincial jail not less than one nor more than six months, or by both such fine and imprisonment, in the discretion of the court, one-third of the fine in such cases to be paid to the informer and two-thirds thereof to the Lighthouse Establishment, to be used in repairing or replacing such buoys or beacons.


SEC. 2. The cost of repairing or replacing any such buoy or beacon which may have been misplaced, damaged, or destroyed by any vessel, boat, raft, or scow being made fast to the same shall, when said cost shall have been legally ascertained, be a lien upon such vessel, boat, raft, or scow, and recovered against the same and the owner or owners thereof in an action of debt in any court of competent jurisdiction.

SEC. 3. The public good requiring the speedy enactment of this bill, the passage of the same is hereby expedited in accordance with section two of "An act prescribing the order of procedure by the Commission in the enactment of laws," passed September twenty-sixth, nineteen hundred.

SEC. 4. This act shall take effect on its passage.


Enacted, August 24, 1903.

## Philippine Islands buoys, beacons, and day marks.

Number.	Location of aid.	Number on aid.	Color.	Description of aid.	Magnetic bearings and distances of prominent objects.	Depth, in feet, at lowest tide.	General remarks, nature of bottom, etc.
CAPE ENGAÑO.							
1	Corregidor Cove-----		White-----	White diamond-shaped beacon, 12 feet high.			Beacon kept on S. 69° E. bearing leads in clear of reefs to anchorage in 10 fathoms.
DIRIQUE COVE.							
2	At head of cove-----		White-----	Square shape on pole, 12 feet high.			Beacon on NE. $\frac{3}{4}$ E. bearing leads in clear of reefs to anchorage in 10 fathoms.
SALOMAGUE.							
3	Reefs to southward of entrance to harbor.	1	Black-----	Can buoy-----	Stone tower, Salomague, N. 54° E.; distance, 2 $\frac{1}{2}$ miles.	30	Coral rock.
4	Reef in southern part of harbor.	2	Red-----	Conical buoy-----	Stone tower, Salomague, North; distance, 1,425 yards.	24	Coral rock.
5	Southwest corner of reef northern side of entrance.	3	Black-----	Can buoy-----	Stone tower, Salomague, N. 36° E.; distance, 1,000 yards.	27	Coral rock. This buoy is at present adrift; will be replaced as soon as possible.
SUBIG BAY.							
6	Off Cubi Point-----	2	Red-----	Nun buoy-----	Caiman Shoal beacon, S. 89° E.; distance, 1 mile.	22	Coral rock.
7	Mayanga Island Shoal---	1	Black-----	Can buoy-----	Center of Mayanga Island, N. 39° W.; distance, 550 yards.	15	Coral rock.
8	Calaclan Point beacon 7 feet above crown of hill on Calaclan Point.		Black and white.	Six-pointed star, 8 feet 10 inches in diameter, white with black center.			Beacon kept on NE. bearing leads clear of shoals off Cubi Point.
9	Caiman Shoal beacon-----		White-----	Truncated conical stone tower about 15 feet high, 6 feet in diameter at base.			Beacon erected on center of Caiman Shoal.
10	Entrance to Olongapo Harbor.	3	Black-----	Can buoy-----	Caiman Shoal beacon, S. 65° W.; distance, $\frac{3}{4}$ mile.	16	Hard sand and small stones.
11	Entrance to Olongapo Harbor.	4	Red-----	Nun buoy-----	Caiman Shoal beacon, S. 72° W.; distance, $\frac{7}{8}$ mile.	14	Hard sand and small stones.
12	Entrance to Olongapo Harbor.	5	Black-----	Can buoy-----	Caiman Shoal beacon, S. 67° W.; distance, $\frac{7}{8}$ mile.	18	Hard sand and small stones.
13	Range marks on Magdalen Bluff.		Black and white.	White triangular shapes with black vertical stripes.			Mark in range, thus,  on N. 63° E. bearing leads clear of shoals off Riviera Point.
MANILA BAY.							
14	Obstruction in Canacao Bay.		R. B. H. S.-----	Nun buoy-----	Sangley Point light structure, N. 69° W.; distance, $\frac{5}{16}$ mile.	21	Buoy is placed close to the wreck of the <i>Castilla</i> , and will be discontinued when wreck is removed.
15	Obstruction in Manila Bay behind breakwater.		R. B. H. S.-----	Can buoy-----	Cathedral spire, N. 22° E.; distance, 1 $\frac{1}{8}$ miles.	15	Buoy is placed on the wreck of an iron steamer, and vessels should not anchor within 120 feet of it.
16	Outer end of breakwater-----		Black-----	Conical buoy-----			This buoy marks outer end of work on breakwater and is being moved from time to time.
17	Entrance to Pasig River---	1	Black-----	Can buoy-----	Pasig Lighthouse, N. 28° E.; distance, $\frac{3}{8}$ mile.	17	Mud bottom.
18	Entrance to Pasig River---	2	Red-----	Nun buoy-----	Pasig Lighthouse, N. 20° E.; distance, $\frac{3}{16}$ mile.	19	Mud bottom.



## Philippine Islands buoys, beacons, and day marks—Continued.

Number.	Location of aid.	Number on aid.	Color.	Description of aid.	Magnetic bearings and distances of prominent objects.	Depth, in feet, at lowest tide.	General remarks, nature of bottom, etc.
MANILA BAY—Cont'd.							
19	Entrance to Pasig River.	3	Black	Can buoy	Pasig Lighthouse, N. 30° E.; distance, $\frac{3}{8}$ mile.	12	Mud bottom.
20	Entrance to Pasig River.	4	Red	Nun buoy	Pasig Lighthouse, N. 15° E.; distance, $\frac{1}{4}$ mile.	16	Hard sand and gravel.
21	Entrance to Pasig River.	5	Black	Flat buoy	Pasig Lighthouse, N. 32° E.; distance, $\frac{1}{8}$ mile.	18	Mud bottom.
ROMBLON.							
22	Reefs off Sabang Point		Black	Stone beacon			It is proposed to erect these beacons during the year 1904.
23	Reefs off Rosas Point		Red	Stone beacon			
24	Reefs off Agbatang Point		Black	Stone beacon			
25	Range marks in Eastern part of harbor.		Black and white.	White triangular shapes with black vertical stripes.			Mark in range, thus,  on S. 68° E. bearing leads in clear of reefs off Sabang and Agbatang Points.
ALBAY GULF.							
26	Northern edge of Catubeg Reef.	1	Black	Can buoy	Libog Church, N. 32° W.; distance, $3\frac{3}{8}$ miles.	27	Coral-rock bottom. Vessels should not pass within 2 cables to the northward of this buoy.
27	Southern edge of Denson Reef.	2	Red	Nun buoy	Capuntucan Point, S. 6° W.; distance, $2\frac{1}{4}$ miles.	30	Immediately north of this buoy there is but 8 feet; one cable south there is 10 fathoms.
SAMAR AND LEYTE.							
28	Lutao Shoal beacon.		White	Tripod made of gas pipe with drum on top.	Catbalogan Church, N. 83° E.; distance, $2\frac{1}{2}$ miles.		Beacon erected about the middle of Lutao Shoal.
29	Eastern end of Lutao Shoal.		Black	Can buoy			It is proposed to place this buoy during the year 1904.
30	Kinituai Reef		Red	Nun buoy	Center of Kinituai Reef, S. by W. $\frac{3}{4}$ W.; distance, $\frac{1}{4}$ mile.	30	Coral rock and sand.
31	Pamuntangan Reef		Red	Nun buoy			It is proposed to place this buoy during the year 1904.
32	Buad Channel off Aokon Island.		Red	Nun buoy	SE. point of Aokon Island, S. 57° W.; distance, 340 yards.	22	About midway between this buoy and North Point of Aokon Island a part of the reef carries but 3 feet of water.
33	Janabatas Channel		Black	Can buoy	Center Dabun Island, N. 33° W.; distance, $\frac{1}{4}$ mile.	14	Sand and gravel.
34	Nababuy Island beacon, San Juanico Strait.						It is expected that this beacon will be constructed on the submerged rock off Nababuy Island during the year 1904.
35	Taeloban end of bank, southern entrance.	1	Black	Can buoy	Basey Church tower, N. 9° E.; distance, $2\frac{1}{4}$ miles.	20	Sand bottom.
36	North side of channel	2	Red	Nun buoy	Point Binatae, N. 70 $\frac{1}{2}$ ° W.; distance, $1\frac{1}{8}$ miles.	20	Small coral sand.
37	South side of channel	3	Black	Can buoy	Point Binatae, N. 62 $\frac{1}{2}$ ° W.; distance, $1\frac{1}{4}$ miles.	20	Small coral sand.
MASBATE.							
38	Palanog Harbor		Black	Can buoy			It is proposed to place a buoy on point of reefs immediately NW. of town.



## Philippine Islands buoys, beacons, and day marks—Continued.

Number.	Location of aid.	Number on aid.	Color.	Description of aid.	Magnetic bearings and distances of prominent objects.	Depth, in feet, at lowest tide.	General remarks, nature of bottom, etc.
CEBU, NORTHERN ENTRANCE.							
39	Entrance buoy	2	Red	Nun buoy	Bagacay Light Station, N. 25° E.; distance, 1 $\frac{3}{8}$ miles.	15	Coral rock and small stones.
40	Point of reef south of entrance.	1	Black	Conical buoy	Maetan Light Station, S. 61° W.; distance, 1 $\frac{1}{8}$ miles.	15	Coral rock and small stones.
41	Channel buoy	4	Red	Conical buoy	Maetan Light Station, S. 58° E.; distance, $\frac{3}{8}$ mile.	16	Soft mud.
42	Channel buoy	3	Black	Conical buoy	Maetan Light Station, N. 65° E.; distance, 1 $\frac{1}{8}$ miles.	23	Soft mud. Buoy is moored on edge of coral reef.
43	Channel buoy	6	Red	Conical buoy	Round tower Mandaue, S. 73° W.; distance, $\frac{1}{2}$ mile.	23	Soft mud. Buoy is moored on edge of coral reef.
44	Channel buoy	8	Red	Conical buoy	Round tower Mandaue, N. 65° W.; distance, $\frac{1}{8}$ mile.	16	Soft mud. Buoy is moored on edge of coral reef.
45	Channel buoy	5	Black	Conical buoy	Round tower Mandaue, N. 13° W.; distance, $\frac{1}{4}$ mile.	24	Soft mud. Buoy is moored on edge of coral reef.
46	Banitac Shoal	10	Red	Conical buoy	Round tower Mandaue, N. 57° E.; distance, 1 $\frac{1}{4}$ miles.	16	Mud bottom.
47	Channel buoy	7	Black	Flat Spanish buoy	San Pedro Light Station, S. 75° W.; distance, 1 $\frac{1}{4}$ miles.	30	Mud. Buoy is moored close to edge of coral reef.
48	Lazarino Shoal	12	Red	Conical buoy	San Pedro Light Station, S. 52° W.; distance, 1 $\frac{1}{8}$ miles.	12	Mud bottom.
CEBU, SOUTHERN ENTRANCE.							
49	Bogo Shoal	1	Black	Conical buoy	Lipata Light Station, N. 52° E.; distance, 1 $\frac{3}{4}$ miles.	24	Coral rock.
50	Lanis Ledge	2	Red	Conical buoy	Lanis Ledge Light Station, N. 70° E.; distance, $\frac{3}{8}$ mile.	26	Coral rock and sand.
51	Lipata Reef	3	Black	Can buoy	Lipata Light Station, west; distance, $\frac{1}{4}$ mile.	24	Coral rock and sand.
52	Narvaez Shoal		R. B. H. S.	Conical buoy	Lipata Light Station, S. 66° E.; distance, $\frac{3}{8}$ mile.	9	Coral rock.
53	Campanario Shoal		R. B. H. S.	Conical buoy	Lipata Light Station, S. 18° W.; distance, .1 mile.	16	Coral rock.
54	Western extremity of Maetan Island.	4	Red	Conical buoy	Lipata Light Station, S. 35° W.; distance, 1 $\frac{1}{4}$ miles.	14	Coral and mud.
55	Channel buoy	6	Red	Conical buoy	San Nicolas Church tower, N. 48° W.; distance, $\frac{1}{4}$ mile.	16	Coral and mud.
ILOILO, NORTHERN ENTRANCE.							
56	Iguana Bank	1	Black	Can buoy	Siete Pecados Light-house, N. 75° W.; distance, 4 $\frac{3}{8}$ miles.	20	Hard sand bottom; shoal patches exist some 200 yards north of buoy, carrying but 17 feet.

## Philippine Islands buoys, beacons, and day marks—Continued.

Number.	Location of aid.	Number on aid.	Color.	Description of aid.	Magnetic bearings and distances of prominent objects.	Depth, in feet, at lowest tide.	General remarks, nature of bottom, etc.
ILOILO, NORTHERN ENTRANCE—Cont'd.							
57	Off Damangas Point	2	Red	Nun buoy	Siete Pecos Light-house, S. 81° W.; distance, 5½ miles.	18	Sand and mud.
58	Iguana Bank	3	Black	Can buoy	Siete Pecos Light-house, N. 71° W.; distance, 1½ miles.	18	Sand and mud.
59	Iguana Bank	4	Red	Nun buoy	Siete Pecos Light-house, N. 58° W.; distance, 3½ miles.	15	Hard sand bottom. Vessels drawing over 12 feet should not pass these buoys nearer than 2 cables.
ILOILO, SOUTHERN ENTRANCE.							
60	Oton Bank	1	Black	Conical buoy	Point Cabalie, N. 63° E.; distance, 3½ miles.	30	Soft mud and sand.
61	Off Point Cabalie	3	Black	Conical buoy	Point Cabalie, S. 28° E.; distance, ½ mile.	28	Soft mud and sand.
62	South of Bondulan	2	Red	Conical buoy	Point Bondulan, N. 38° E.; distance, 1½ miles.	30	Soft mud and sand.
63	Entrance to Iloilo River	4	Red	Conical buoy	Iloilo Light Station, S. 78° W.; distance, 200 yards.	14	Buoy is moored on edge of flat which partly dries at low water. Red lantern exhibited on buoy at night.
CUYOS.							
64	North side of entrance		Black	Barrel buoy	Marking shoal to northward of anchorage.	18	Red light on end of pier on N. 85° E. bearing leads in clear of buoys at night.
65	South side of entrance		Red	Barrel buoy	Marking shoal to southward of anchorage.	18	Deeper water will be found on line between these buoys and outside of that line. It is intended to replace these with more substantial buoys at a future date.
BASILAN ISLAND.							
66	Pamelukan Bank			An iron tripod carrying an oil can and white flag on top.	Northwest point of Lampinigan Island S. 50° 10' W.; east tangent of Matanaye Island S. 16° E.; north tangent of Moro Island S. 79° 35' E.	25	35 yards northeast of beacon there is a rock with but 6 feet of water over it where the chart shows 16 feet. This beacon is reported missing. (See N. M. No. 11, C. and G. S., Oct. 30, 1903.)
67	Southern extremity of Malamaui Island western entrance to Port Isabela.			An iron pipe carrying a flag.	North tangent Moro Island, S. 85° E.; north tangent Matanaye Island S. 43° 40' W.; southwest tangent Malamaui Island N. 15° 15' W.		Vessels passing this beacon on an east-and-west course at a distance of 100 yards will find 4 fathoms and over.
68	Lampinigan Island			A tripod of 2-inch piping 35 feet high.	Beacon erected on westernmost hill on island.		

Supplementary to buoys and beacons.

Number.	Location of aid.	Number on aid.	Color.	Description of aid.	Magnetic bearings and distances of prominent objects.	Depth, in feet, at lowest tide.	General remarks, nature of bottom, etc.
	San Fernando de Union	1	Black	Can buoy	On point of shoal east of light station.		It is proposed to place the buoys given in this supplementary list during the year 1904 as time, prevailing monsoon, and other circumstances will permit.
		2	Red	Nun buoy	On shoal, eastern side of entrance.		
	Port Bolinao	1	Black	Can buoy	To mark edge of reefs at western entrance.		
		2	Red	Nun buoy			
	Port Matalvi		White	Wooden beacon	Wooden beacon on Iagat Island.		
	Albay Gulf		Black	Can buoy	Manito Reef		
			Red	Nun buoy	Barao Reef		
	Port Gubat	1	Black	Can buoy	On shoals at entrance to inner harbor.		
		2	Red	Nun buoy			
	Cebu		Red	First-class nun buoy.	On shoals to southward of Maetan Island.		
	Misamis port	1	Black	Can buoy	On Loculan Shoals		
		2	Red	Nun buoy	On Narvacz Shoal		

### Correction slip to list of buoys, beacons, and day marks.



PLATE I.



CAPE ENGAÑO.



LINAO.

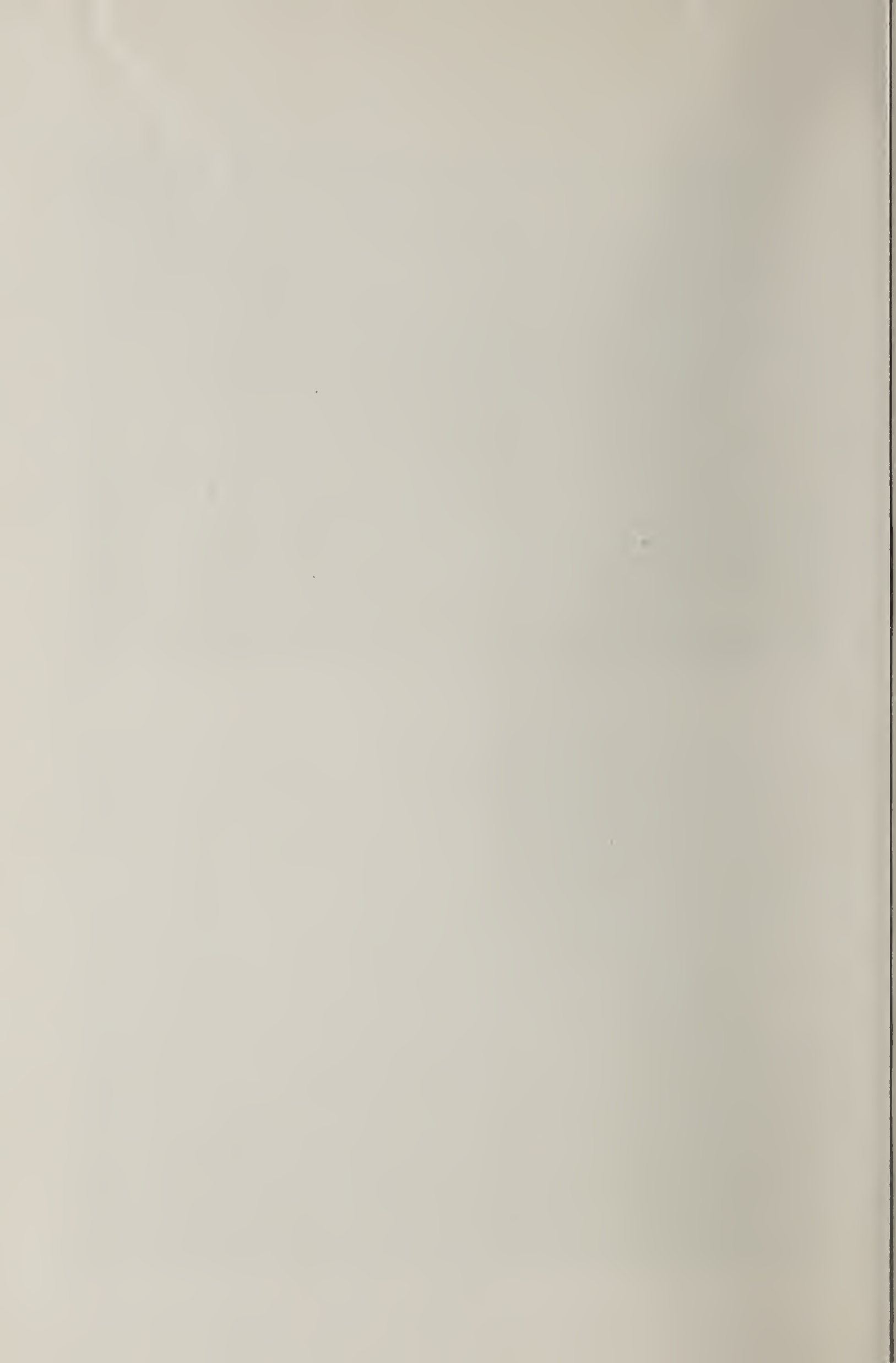




PLATE II.



CAPE BOJEADOR.



CAPONES.

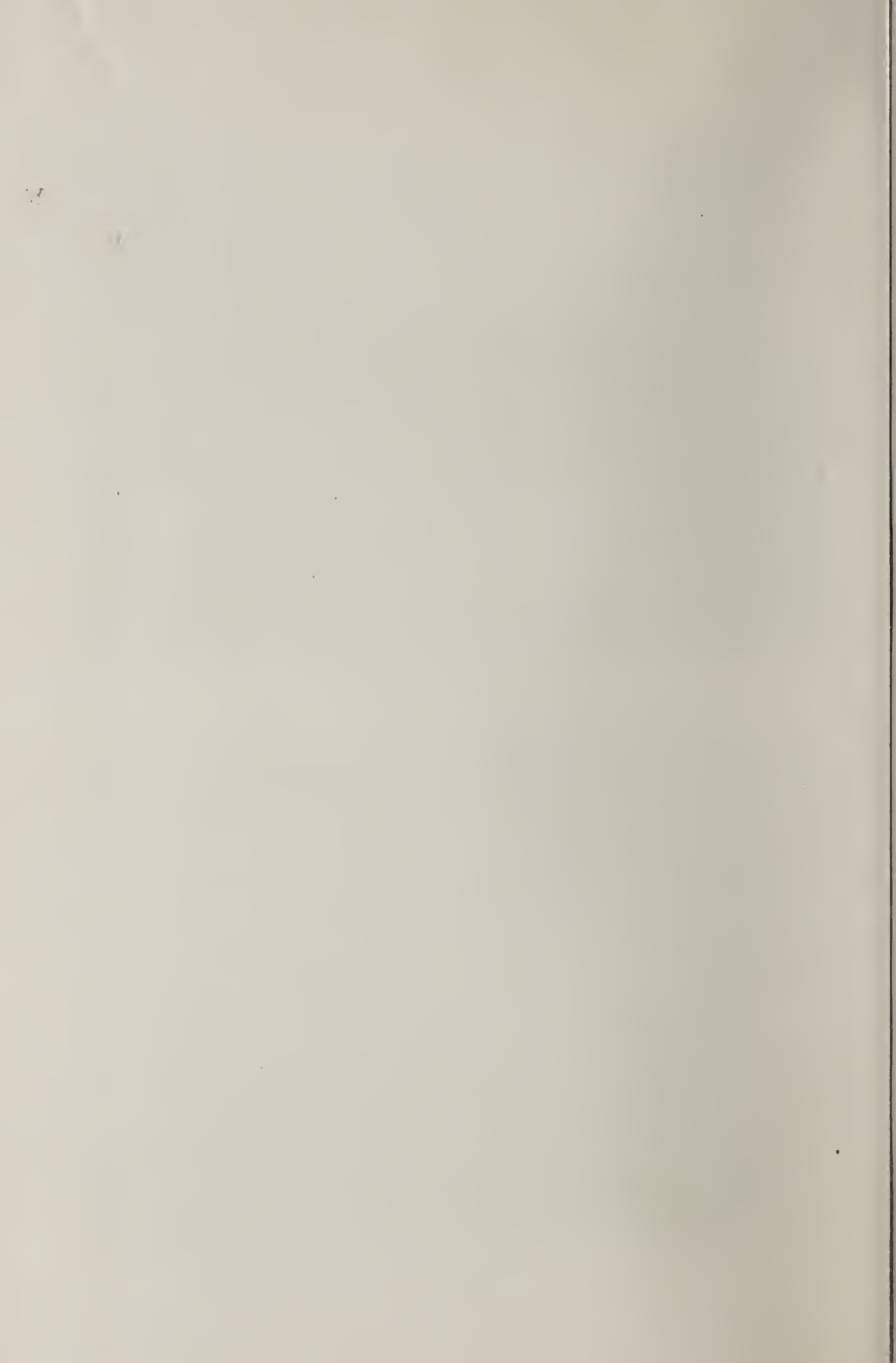
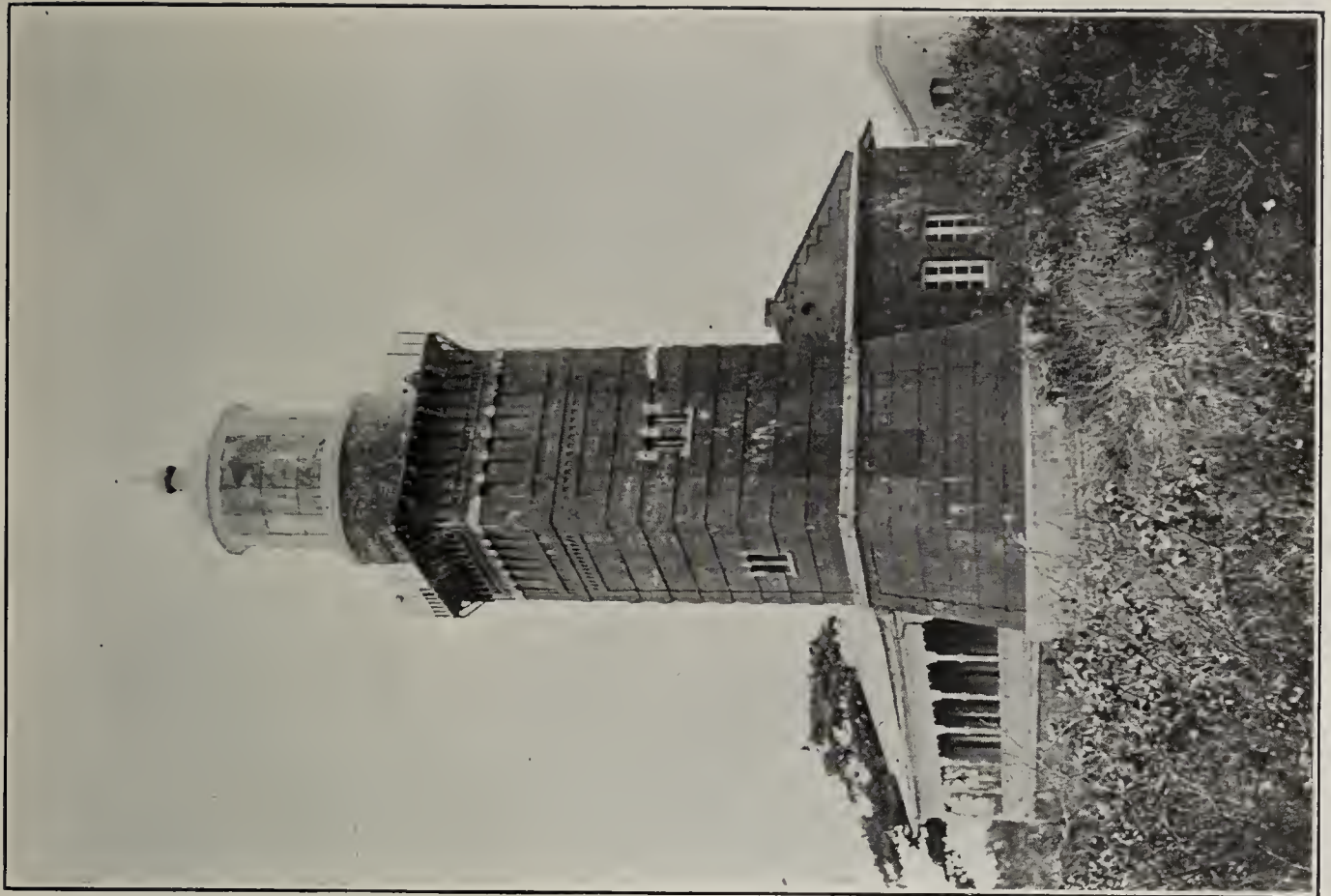




PLATE III.



CABRA.



CAPE MELVILLE.

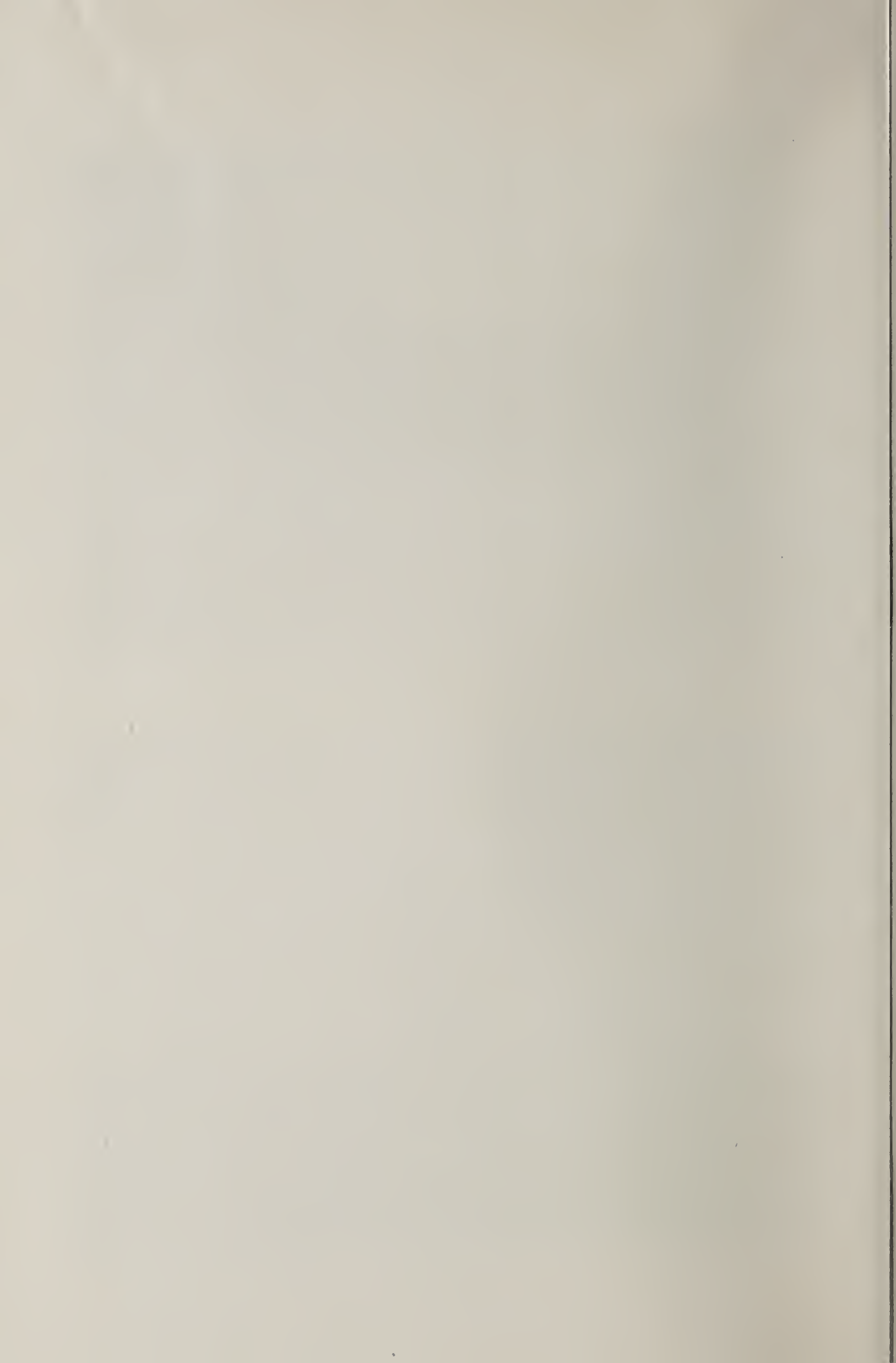
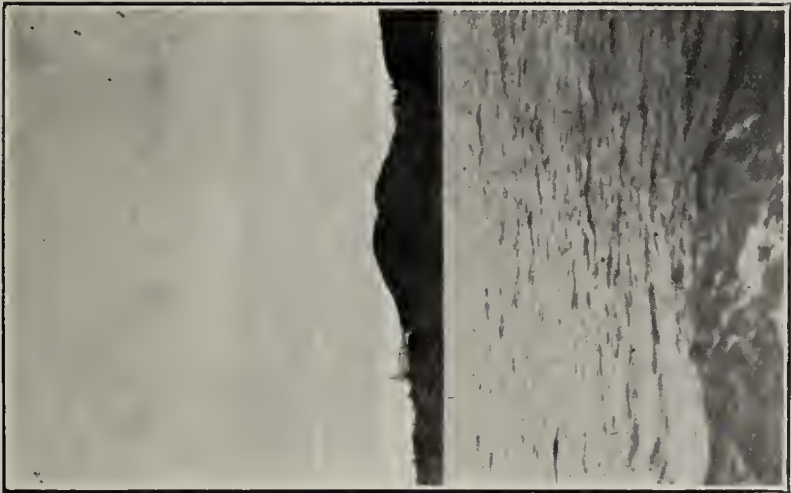
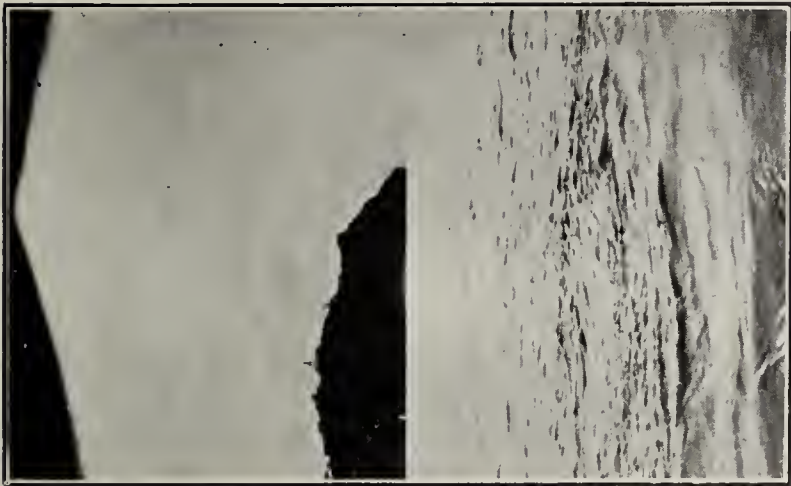


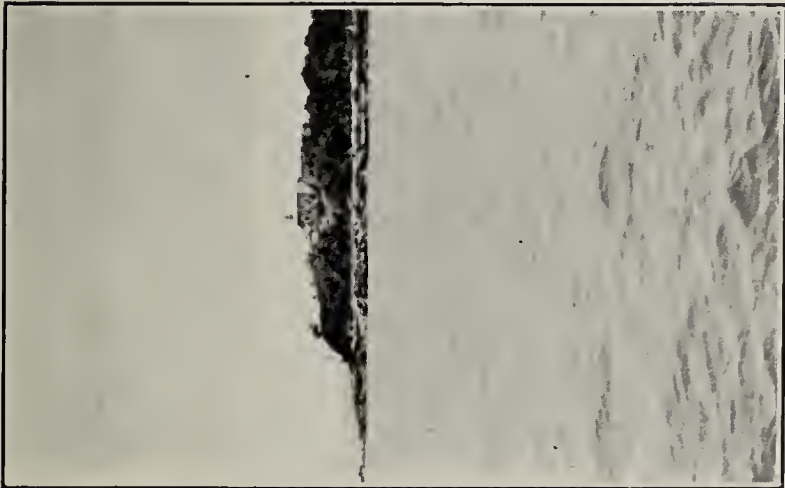
PLATE IV.



MALABRIGO.



BUGUI.



CAPUL.

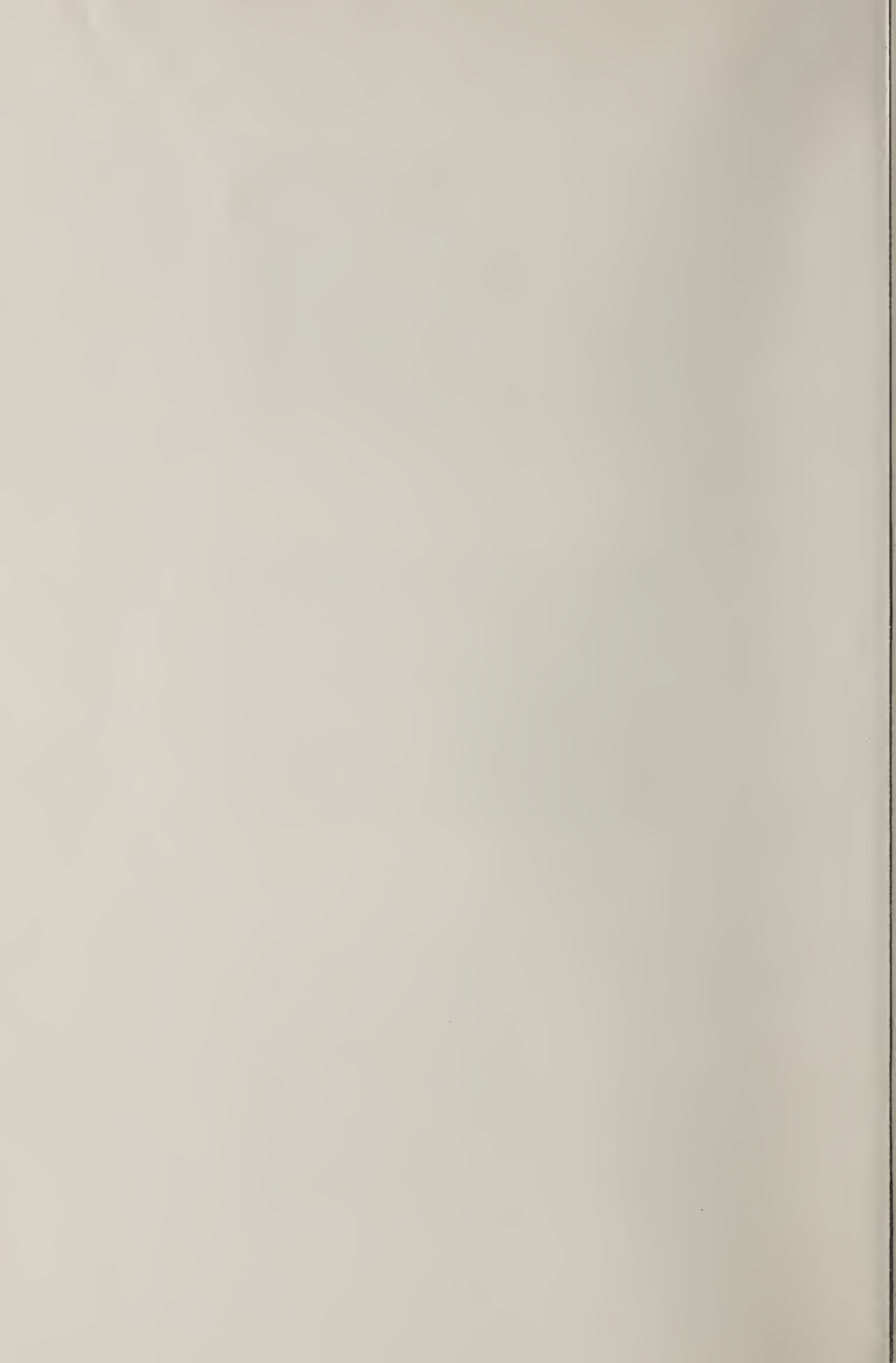




PLATE V.



JINTOTOLO.



MANIGONIGO.



GIGANTES.

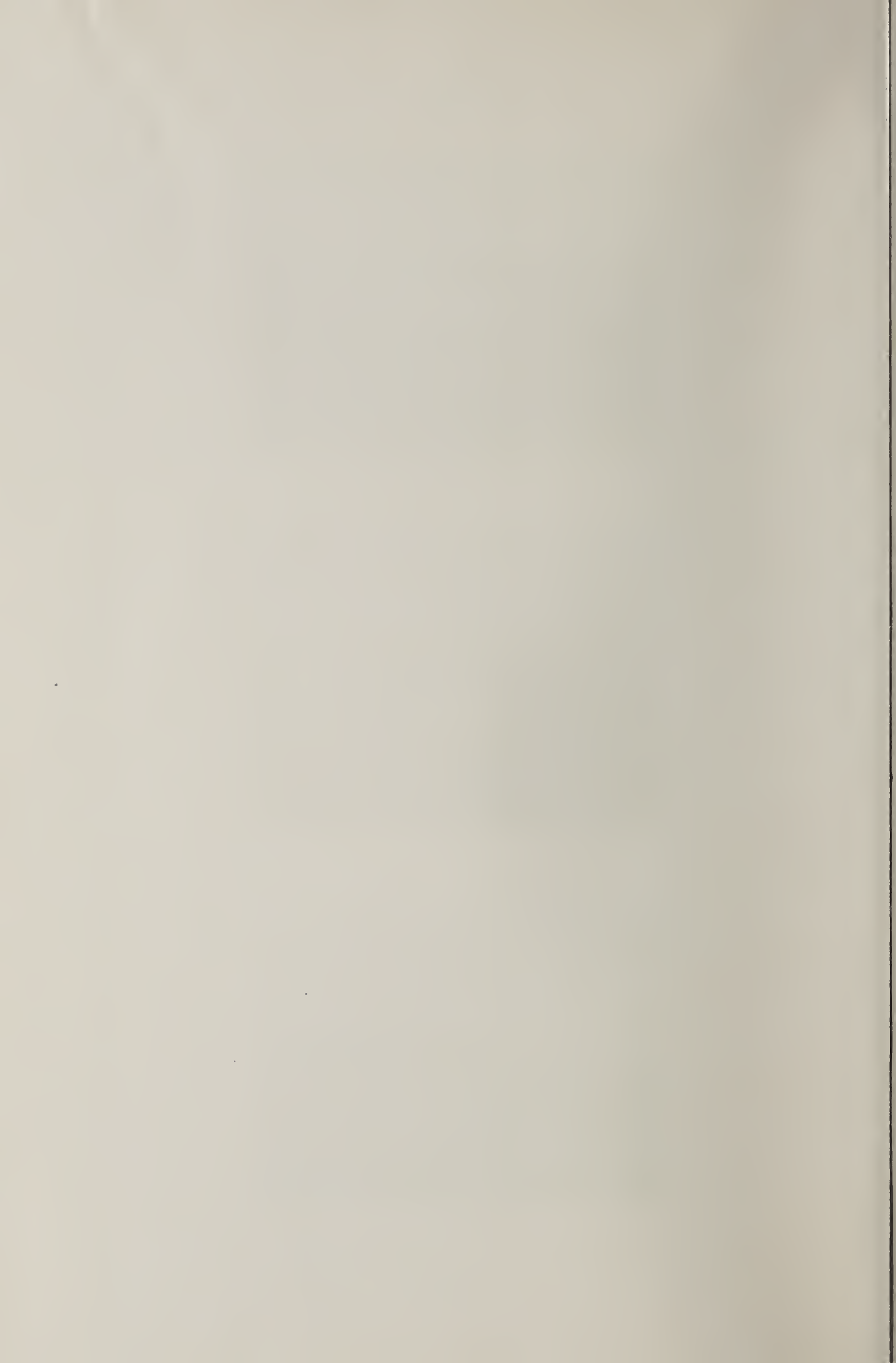


PLATE VI.



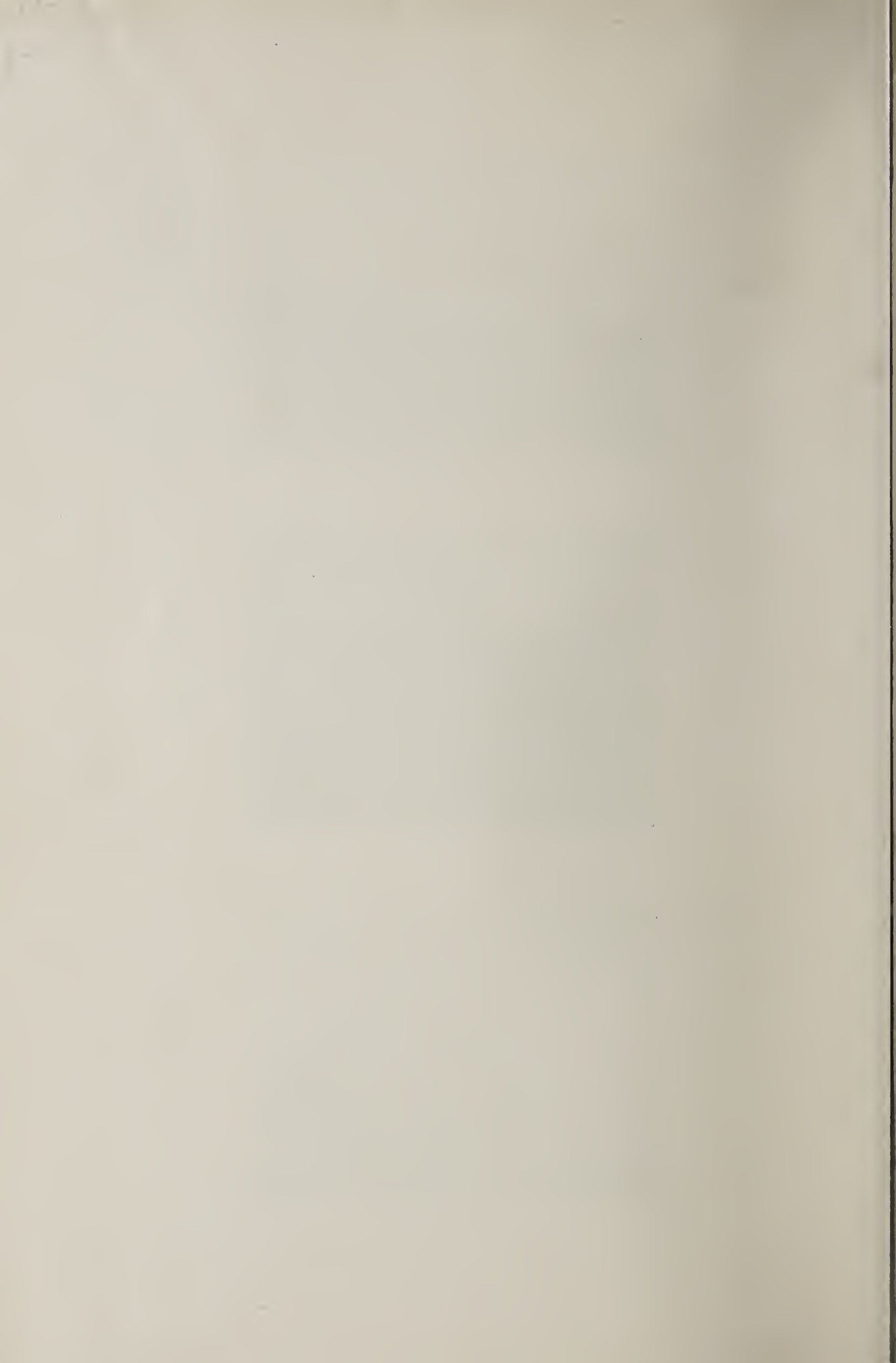
BAGACAY.



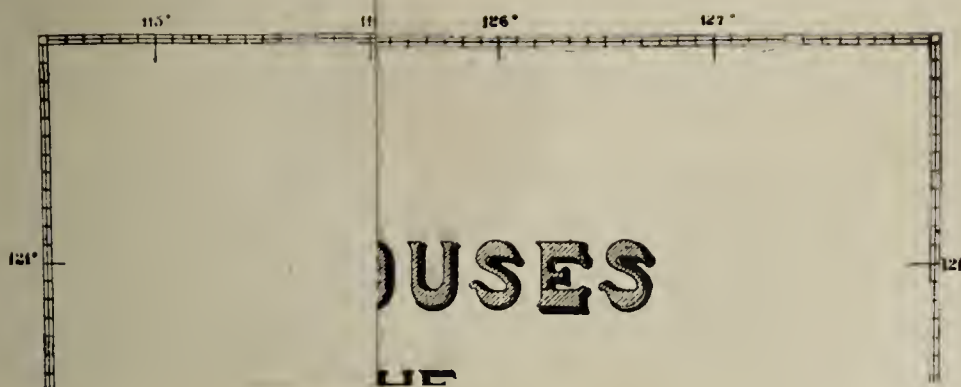
CALABAZAS.



SIETE PECADOS.







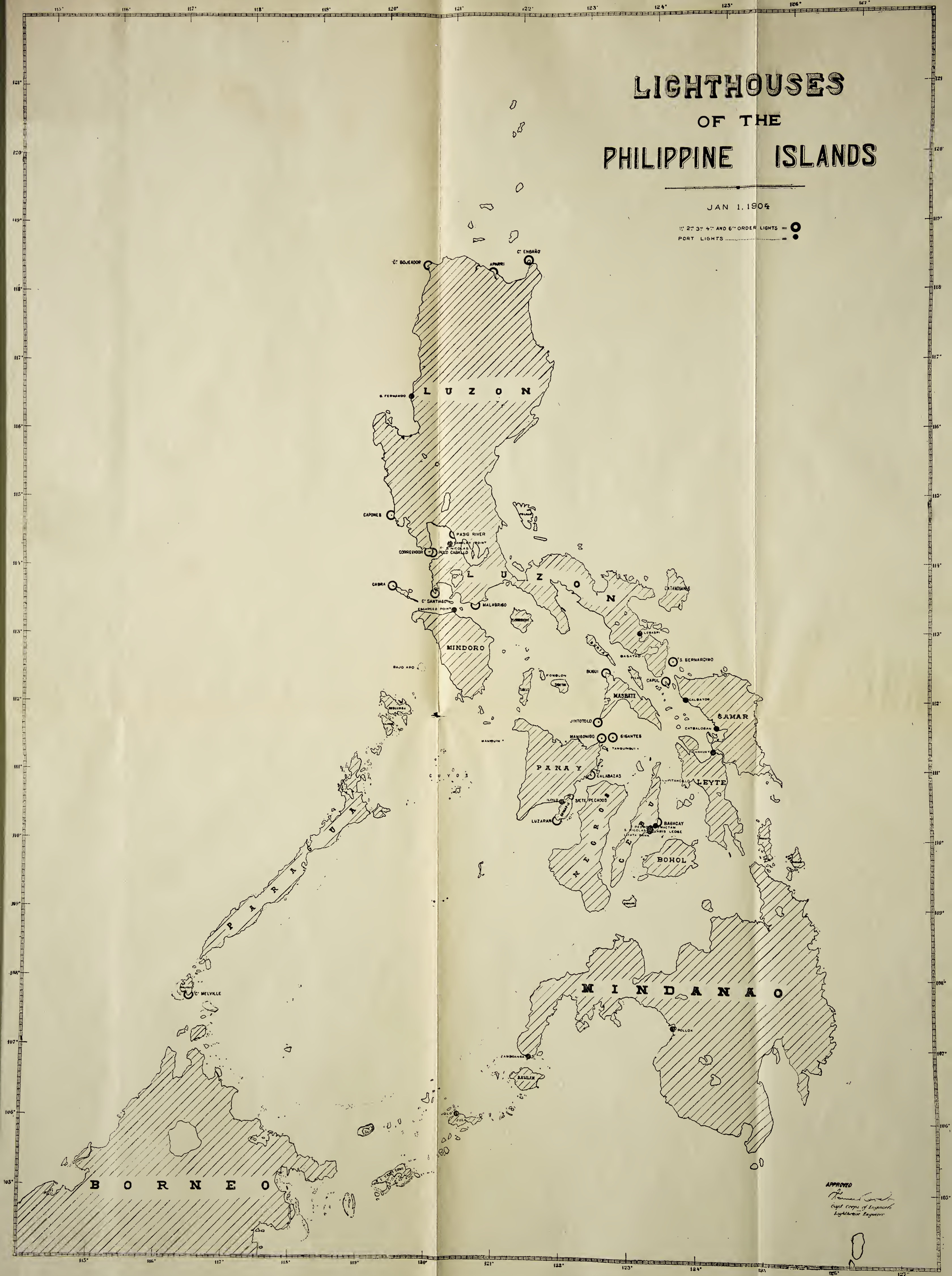




# LIGHTHOUSES OF THE PHILIPPINE ISLANDS

JAN 1, 1904

1" 2" 3" 4" AND 6" ORDER LIGHTS =   
PORT LIGHTS 

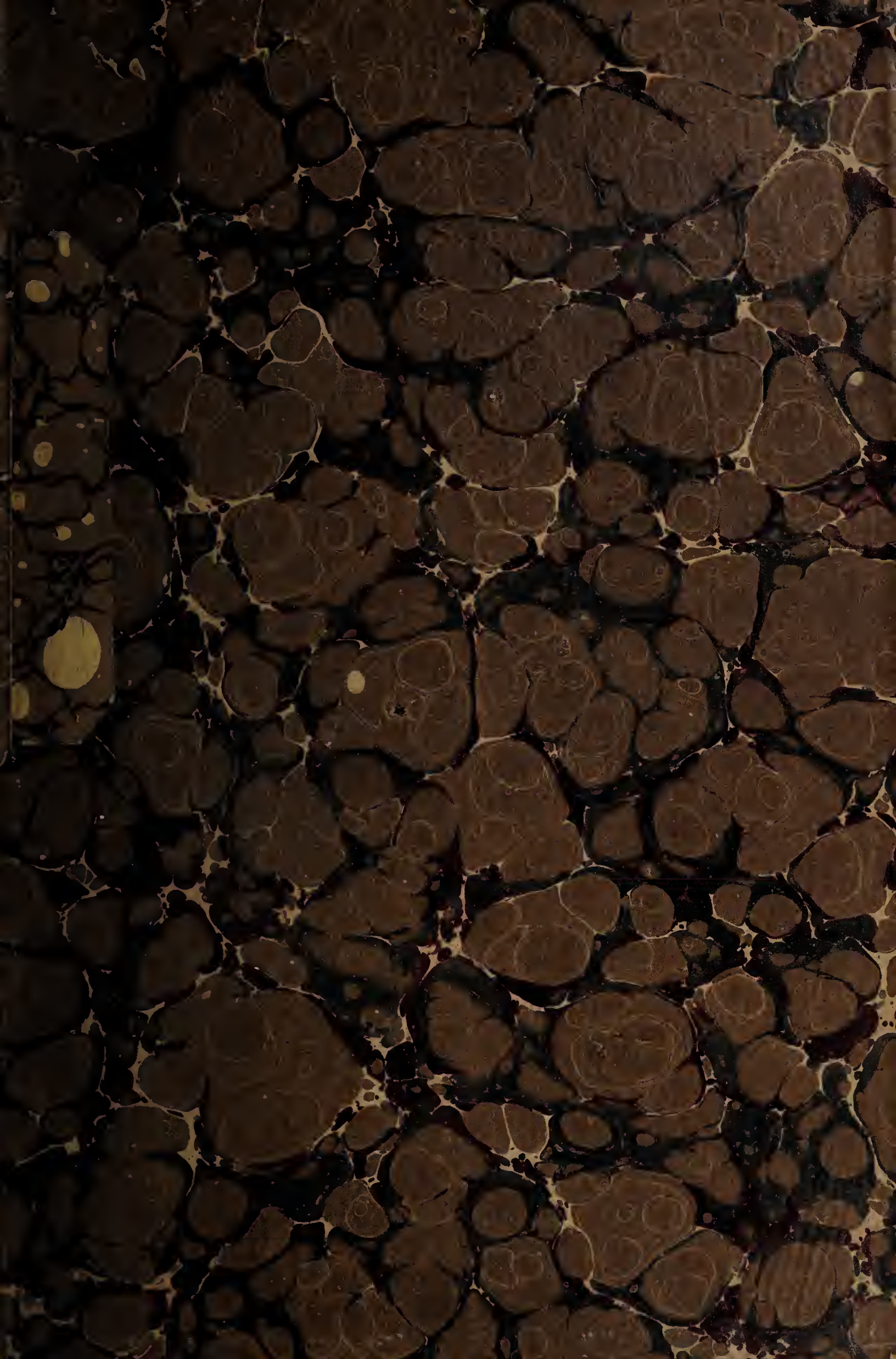
















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